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Editorial

Undergraduate medical education – future directions

The responsibility to educate doctors was one of the earliest traditions of medicine. For instance the first section of the Hippocratic oath provides the first written framework for valuing education in medicine and laying upon doctors the duty to pass on their skills and learning.[1] It is only after this section that the oath turns to the more familiar duty of a doctor to patients. It is interesting therefore that in one of the earliest written codes of practice setting clear standards for those engaged in the profession of Medicine the responsibility for teaching was placed in pole position. Education has therefore been at the heart of the ethos of medicine since the earliest days of the Western tradition.

Since the time of the Hippocratic School medical teaching has developed considerably, yet along distinct lines with a changing emphasis on two particular priorities, the need for a firm grounding in the scientific basis of the field and the practical skills necessary for diagnosis and the management of patients. The importance of the patient in education was summed up by William Osier as follows: "He who studies medicine without books sails an uncharted sea, but he who studies medicine without patients does not go to sea at all." For many years, though, there have been additional mounting tensions generated largely because of the increasingly rapid growth of medical knowledge and the need to rationalise how much of this plethora of information is transmitted to students. Even before the exponential increase in medical knowledge of the past forty years there were concerns about information overload, described prosaically as the "overburdening of young minds". The traditional approach to undergraduate medical training characterised by the explicit division of courses into biomedical science and clinical training also came under scrutiny as ideally these should interweave throughout medical training; it was also felt that that formal instruction in those characteristics of a doctor that should provide the basis for ideal patient care, such as skills in communication, should form an early part of the medical curriculum. In the UK this culminated in the publication of a new vision of the aims, objectives and methods of undergraduate training by the General Medical Council (GMC), Tomorrows doctors in 1993 and subsequently modified in 2003.[2] This laid down a clear statement of the expectations of the newly qualified medical graduate with a strong emphasis on patient-centered education and people skills, vertical integration of learning. It also made it a requirement to provide, in up to a third of the course, a selection of relevant modules which would be chosen by the students themselves, now known as the student selected components.

The curriculum at Queens has remained responsive to change and variation. Broadly speaking, while it retains clearly recognisable elements of basic medical sciences such as anatomy and physiology, from the outset students are taught clinical skills that are fundamental to communicating with and caring for patients. In the later years the students learn medicine and surgery along with the specialities. During this period they also receive training in other basic elements of medicine from disease mechanisms to the legal aspects of medicine. This is not a static position and medical curricula continue to grow, adapt and contract to take account of changes in teaching methods and needs. A number of changes have been made in the past few years in the undergraduate medical curriculum in Queens and reflect this responsiveness to re-evaluation of the course; these include the introduction of a module on the mechanisms of disease and a total revision of the final year so that work shadowing, which is intended to hone the skills needed by PRHOs, is timetabled after finals. Anatomy is taught alongside the application of imaging techniques in medicine and in child health there is a special focus on the development of the doctor nurse team. We have recently introduced a new structure, the Institute of Medical Education, to foster teaching and teachers. These are but a few examples of the changes.[3]

The biggest challenge for the next couple of years is the enlargement of the medical course in Queens to accommodate an extra 80 medical students who

will be needed to make good the short fall in the complement of doctors in Northern Ireland.[3] This has resulted in an expansion programme involving a building schedule with the construction of a new medical school on the BCH site and a new clinical skills centre, the revision of the curriculum and a recruitment drive to bring in an additional 28 clinical academic staff over the next few years. There is much to be done before the new intake starts in September. While the challenges of medical education and the prospect of enlarging the School and its staff provide us all with a stimulus it would be wrong to ignore clouds on the horizon. Many are problems that beset all educational initiatives in the UK. Foremost amongst these are the pressures on time resulting from the introduction of the new consultant contract and the European working hours directive both of which attempt to confine activity within a defined weekly schedule. The pressures on consultant and general practitioner time have been underestimated in most health service planning and even before the arrival of the new consultant contract time available to carry out audit, governance tasks, keeping abreast of medical advances or even to talk with one colleagues was at a premium.[4] There is a risk to the training of all health care professionals if the time needed to provide education at all levels within the health service is regarded as a optional call on a busy schedule. In addition Universities, continually subject to research assessment, have inevitably placed a premium on high quality research. Delivering a complex educational agenda while maintaining both clinical and research excellence is a daunting task and arguably only achievable in a much extended, but hopefully fulfilling, working week. Curricular change has reduced some of the fundaments of basic training in order to provide more flexible opportunities for student learning and a wider spectrum of teaching opportunities for doctors. Yet staffing these student selected components with teachers will pose a severe challenge in the next few years. These factors, amongst others, continue to exert pressure on doctors.

Will these changes produce a better doctor? The quality of young doctors graduating from our system remains high and apparently little affected by this change. However there are some signs that there are benefits from the focus on communication skills early in the medical educational pathway. For instance the fourth year students working outside the main campuses have been complemented on their heightened confidence and abilities in dealing with and relating to patients. It remains important though in something as important as medical education that the changes we introduce follow the principles of good practice and are not driven by fashion or whim. The course will continue to change but this should be by rational and assessable evolution which is easier to achieve where many of the practising doctors trained locally. It is also important that this is not driven by something that we now teach our students to regard with extreme suspicion - practice based on inadequate evidence.[5] In Northern Ireland we have the opportunity to do something that would be difficult elsewhere in the UK – to assess the effect of changes of medical training on our graduates and to base alterations on solid evidence.

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